

IN THE SPECIFICATION:

Please replace the paragraphs starting on page 4, line 13, and continuing through page 6, line 13, with the following text:

"a second step of removing silicon nitride formed in the reaction container, with  $\text{NF}_3$  gas flowing into the reaction container, before said silicon nitride film formed in said reaction container reaches a thickness of 4,000 Å.

B1  
Preferably, the semiconductor device manufacturing method according to the first aspect of the present invention further comprises the first step after the second step. That is the semiconductor device manufacturing method according to the first aspect of the present invention preferably comprises the first step, thereafter the second step and thereafter the first step again.

Preferably, the reaction container is made of quartz and/or a member made of quartz is used in the reaction container.

Preferably, the second step is carried out in a state where a pressure in the reaction container is greater than or equal to 10 Torr.

According to a second aspect of the present invention there is provided a semiconductor device manufacturing method including:

a first step of forming, by a thermal chemical vapor deposition method, a silicon nitride film on an object disposed in a reaction container, with bis tertiary butyl amino silane and  $\text{NH}_3$  flowing into the reaction container, and

a second step of removing silicon nitride formed in the reaction container, with  $\text{NF}_3$  gas flowing into the reaction container, before the silicon nitride film formed in the reaction container reaches a thickness that generates particles on the object.

According to a fourth aspect of the present invention there is provided a semiconductor device manufacturing method including:

a first step of forming, by a thermal chemical vapor deposition method, a silicon nitride film on an object disposed in a reaction container, with bis tertiary butyl amino silane and  $\text{NH}_3$  flowing into the reaction container;

a second step of removing silicon nitride formed in the reaction container, with  $\text{NF}_3$  gas flowing into the reaction container; and

a step of purging the reaction container using the  $\text{NH}_3$  gas at least one of before and after the first step."

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Please replace the section of the specification entitled ABSTRACT on page 20, lines 1-9, with the following text:

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-- ABSTRACT

A reaction container cleaning method includes flowing  $\text{NF}_3$  gas into the reaction container, and removing a silicon nitride film formed in the reaction container. --

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